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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

AMINI, JAVID A

ART UNIT

PAPER NUMBER

2672

17

DATE MAILED: 09/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/778,515

Applicant(s)

EDGE ET AL.

Examiner

Javid A Amini

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-9,11-17,19,21-26,28-33,35-37 and 39-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

Applicant's arguments filed March 01, 2004 have been fully considered but they are not persuasive.

- Applicant on page 15 lines 9-28 argues that the Examiner has not established a prima facie case of obviousness-type double patenting. Applicant discloses that claim 1 of the present application requires a dithered gray background representing a gray level of approximately 25-40% and that claim 1 of the '704 (the same as application publication US 2002/0015044A1) application does not specify such a feature instead represents (generating a set of red-blue shifted gray channel that represent shifts in the red channel, blue channel, or a combination of the red and blue channels away from the first gray element). Examiner's reply: '704 in paragraph 0127 teaches the RGB gray patches can be generated with the same value of green selected in the previous fine gamma step in combination with values of red and blue that are substantially equal to or systematically shifted from the previously selected value of green. The RGB patches can be displayed against a gray background that is dithered in the same manner as the green dithered background of the previous step (fine gamma), as indicated by reference numeral 112.
- Applicant on page 16 lines 1-3 argues that the Examiner's analysis is in error. Examiner refers Applicant to reread the paragraph 0119 of '704 that teaches based on the selected green patch, which again may be selected by clicking on it with a pointing device, color profile server 18 computes a coarse gamma, as indicated by reference numeral 104 in FIG. 8. The coarse gamma determined in this step can be used as an

estimate for the average gamma of R, G, and B via selection of a green patch from the set of green patches against the dithered green background. The dithered green background may be set at approximately 25% to 50%. Dithered backgrounds approaching approximately 33% may more closely match the actual midpoint of black to green transition for the display device, and may be preferred for typical display devices. In the case where the claimed ranges “overlap or lie inside ranges disclosed by the prior art” a prima facie case of obviousness exists. In re Wertheim, 541 F.2d 257, 191USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990). Examiner suggests Applicant, to provide a method of obtaining gray level of 25-40% without adjusting the red-blue shift gray level on next response.

- According to the above arguments, the provisional obviousness-type double patenting rejection is still maintained.
- Applicant on page 16 lines 24-29 argues the Examiner’s interpretation of dithering is incorrect with respect to the Yamamoto reference. Reminder: the Yamamoto reference is the prior art for the office action dated 2/27/03. Examiner’s reply: the interpretation is correct, if Applicant differentiates closely to the Examiner’s interpretation and the Examiner suggested with respect to the Yamamoto reference of dithering background. Examiner includes copy of pages from Microsoft Computer Dictionary fifth edition.
- Applicant on page 17 8-15 argues about the “gray elements”, and argues that the “gray” refers to the blending of the colors. Examiner’s reply: Examiner agrees with Applicant’s interpretation, but Examiner’s intention is as follows: how many “gray elements” could a user select? Does Applicant have anticipated number?

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- Applicant on page 18 lines 4-22 provides an example that Examiner is agreed with the concept of the example.
- Applicant on pages 18 lines 23-29 argues the applied references do not teach a single dithered gray background displayed simultaneously with the gray elements, and which represents a fixed gray level of approximately 25 to 40%. Examiner's reply: As repeated from previous office action, see the Figure of the Brettel applet. This applet allows for the adjusting of both the center square and the background. Further, the gray values of these items can be varied between 0-254, which, on a percentage scale is 0-100%. For example, a gray value of 84 for the background is equivalent to approximately 33% gray level. The applet works for background levels from approximately 2 to 190, which correspond, to approximately .01% to 75% background gray level range. Thus, the applet includes the claimed range of 25-40%. In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. In re Wertheim, 541 F.2d 257, 191USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990).
- Applicant on page 19 lines 2-12 argues the Brettel applet process is different from the claimed invention process. Examiner's reply: the product of the independent claims 1, 15, 22, 25, 41, 45 is similar to Brettel applet product; therefore, the processes of the present invention and the prior art should be similar. The Applicant should explicitly specify the significant of the process in the claim invention. Applicant should also provide a clarification for the differences between the prior art and the present invention.

- Applicant on page 19 lines 20-26 argues the background presented by the Brettel applet is not dithered, and is not fixed to a particular gray level range. Examiner's reply: Brettel applet in the figure shown on page 1 illustrates a gray value background at 84 and this value can be fixed to gray level range. According to the definition of "dithering", the background presented by the Brettel applet considers dithered.
- Applicant on page 20 lines 17-30 argues the reference Berger provides no teaching sufficient to bridge the gap between the Brettel applet and the claimed invention. Examiner's reply: Applicant in claim 1 last two lines claimed "estimating a gamma for the display device" Berger on page 2 last paragraph teaches the image on page 3 allows a user to directly estimate the gamma of the user's display system.
- Applicant on page 21 lines 21-24 argues that the applied references provide no teaching with respect to claims 2 and 26. Examiner's reply: the Brettel applet allows for the adjusting of both the center square and the background. Further, the gray values of these items can be varied between 0-254, which, on a percentage scale is 0-100%. For example, a gray value of 84 for the background is equivalent to approximately 33% gray level. The Brettel applet works for background levels from approximately 2 to 190, which correspond, to approximately .01% to 75% background gray level range.
- Applicant on page 21 lines 24-30 argues Brettel and Berger provide no teaching concerning estimation of a coarse gamma and a fine gamma. Brettel on page 1, discloses to estimate the gamma of the power function. Wherein the estimated fine gamma is the estimated gamma.

- Applicant on page 22 lines 3-14 argues that Berger does not even mention estimation of a coarse (rough) gamma and a fine gamma estimate. Examiner's reply: Berger does not mention of coarse and fine gamma, however Berger illustrates in figure shown on page 2.
- Applicant on pages 23-27 argues about claims 3, 4, 6, 9-11, 13-24, 27, 28, 30, 33-35, 37 and 39-40 rejections. Examiner's reply: Applicant should refer to office action for the responses to the arguments on pages 23-27.

6.33 Amendment to the Claims, 37 CFR 1.121

The amendment to the claims filed on March 01, 2004 does not comply with the requirements of 37 CFR 1.121(c) because claims 19, 21-23 and 37 are depending to cancelled claims. Amendments to the claims filed on or after July 30, 2003 must comply with 37 CFR 1.121(c) which states:

(c) *Claims*. Amendments to a claim must be made by rewriting the entire claim with all changes (e.g., additions and deletions) as indicated in this subsection, except when the claim is being canceled. Each amendment document that includes a change to an existing claim, cancellation of an existing claim or addition of a new claim, must include a complete listing of all claims ever presented, including the text of all pending and withdrawn claims, in the application. The claim listing, including the text of the claims, in the amendment document will serve to replace all prior versions of the claims, in the application. In the claim listing, the status of every claim must be indicated after its claim number by using one of the following identifiers in a parenthetical expression: (Original), (Currently amended), (Canceled), (Withdrawn), (Previously presented), (New), and (Not entered).

(1) *Claim listing*. All of the claims presented in a claim listing shall be presented in ascending numerical order. Consecutive claims having the same status of "canceled" or "not entered" may be aggregated into one statement (e.g., Claims 1-5 (canceled)). The claim listing shall commence on a separate sheet of the amendment document and the sheet(s) that contain the text of any part of the claims shall not contain any other part of the amendment.

(2) *When claim text with markings is required*. All claims being currently amended in an amendment paper shall be presented in the claim listing, indicate a status of "currently amended," and be submitted with markings to indicate the changes that have been made relative to the immediate prior version of the claims. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by

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strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed within double brackets if strike-through cannot be easily perceived. Only claims having the status of “currently amended,” or “withdrawn” if also being amended, shall include markings. If a withdrawn claim is currently amended, its status in the claim listing may be identified as “withdrawn—currently amended.”

(3) *When claim text in clean version is required.* The text of all pending claims not being currently amended shall be presented in the claim listing in clean version, *i.e.*, without any markings in the presentation of text. The presentation of a clean version of any claim having the status of “original,” “withdrawn” or “previously presented” will constitute an assertion that it has not been changed relative to the immediate prior version, except to omit markings that may have been present in the immediate prior version of the claims of the status of “withdrawn” or “previously presented.” Any claim added by amendment must be indicated with the status of “new” and presented in clean version, *i.e.*, without any underlining.

(4) *When claim text shall not be presented; canceling a claim.*

(i) No claim text shall be presented for any claim in the claim listing with the status of “canceled” or “not entered.”

(ii) Cancellation of a claim shall be effected by an instruction to cancel a particular claim number. Identifying the status of a claim in the claim listing as “canceled” will constitute an instruction to cancel the claim.

(5) *Reinstatement of previously canceled claim.* A claim which was previously canceled may be reinstated only by adding the claim as a “new” claim with a new claim number.

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Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 19, 21-23 and 37 recite the limitation of depending to cancel claims. There is insufficient antecedent basis for this limitation in the claim.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 6, 7, 8, 10, 12, 13, 14, 15, 16, 19, 21, 24, 25, 30, 31, 32, 34, 36, 37, 40 and 39 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 5, 6, 7, 9, 11, 12, 13, 16, 17, 18, 22, 27, 29, 31, 32, 33, 35, 37, 38, 41 and 42 of copending Application No. 09/778,704. Although the conflicting claims are not identical, they are not patentably distinct from each other because, see below:

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The comparison of claims 1, 15, and 25 (the limitations shown by A, B, C,) over claims 1,16 and 27 (the limitations shown by A', B', C',) of copending Application No. 09/778,704.

- **Pending independent claim 1, of 09/778,515:** A method comprising: (A) generating gray elements and a single dithered gray background for display on a display device, (B) the dithered gray background representing a fixed gray level of approximately 25 to 40%, and at least some of the gray elements representing different gray levels; (C) displaying the dithered gray background simultaneously with the gray elements; and (D) estimating a gamma for the display device based on user selection of one of the gray elements that appears to most closely blend with the dithered gray background.
- **Pending independent claim 1, of 09/778,704:** A method comprising: (A') generating a first gray element based on an estimated gamma for a green channel of a display device; (B') generating a set of red-blue shifted gray elements that represent shifts in the red channel, blue channel, or a combination of the red and blue channels away from the first gray element; (C' and D') and estimating a gray balance of the display device based on user selection of one of the gray elements that appears to most closely blend with a gray background.

The comparison: The limitations A and C teach by A', C' and D'. But the limitation of B states 25-40% gray level, however, B' limitation states red-blue shift gray level as a way to adjust the second level. By adjusting the red-blue shift gray level, one may obtain gray level of 25-40% of B limitation.

- **Pending independent claim 15, of 09/778,515:** A system comprising: (A) a web server residing on a computer network, the web server transmitting web pages to remote clients residing on the computer network; (B) a color image server residing on the computer network, the color image server transmitting color images referenced by the web pages to the clients for display on display devices associated with the clients; (C) a color profile server residing on the computer network, the color profile server guiding the clients through a color profiling process to obtain information characterizing the color responses of the display devices associated with the clients, wherein the information includes a gamma for the display device, the gamma being determined by selecting one of a plurality of gray elements displayed by the display device that appears to most closely blend with a dithered gray background displayed simultaneously with the gray elements that represents a fixed gray level of approximately 25 to 40%, wherein at least some of the gray elements representing different gray levels; (D) and one or more color correction modules that modify the color images transmitted by the color image server based on the information to improve the accuracy of the color images when displayed on the respective display device.
- **Pending independent claim 16, of 09/778,704:** A system comprising: (A') a web server residing on a computer network, the web server transmitting web pages to remote clients

residing on the computer network; (B') a color image server residing on the computer network, the color image server transmitting color images referenced by the web pages to the clients for display on display devices associated with the clients; (C') a color profile server residing on the computer network, the color profile server guiding the clients through a color profiling process to obtain information characterizing the color responses of the display devices associated with the clients, wherein the information includes a gray balance for each of the display devices, and the color profiling process includes: displaying a first gray element based on an estimated gamma for the green channel of the display device, displaying a set of red-blue shifted gray elements that represent shifts in the red channel, blue channel, or a combination of the red and blue channels away from the first gray value, selecting one of the gray values that appears to most closely blend with a gray background, and estimating the gray balance of the display device based on the selected gray element; (D') and one or more color correction modules that modify the color images transmitted by the color image server based on the information to improve the accuracy of the color images when displayed on the respective display device.

The comparison: The limitations of A, B, and D teach by the A', B', and D'. But the limitation of C states 25-40% gray level, however, C' limitation states red-blue shift gray level as a way to adjust the second level. By adjusting the red-blue shift gray level, one can obtain gray level of 25-40% of C limitation.

- **Pending independent claim 25, of 09/778,515:** A computer-readable medium containing instructions that cause a programmable processor to: (A) simultaneously display a plurality of gray elements on a display device against a single dithered gray background representing a fixed gray level of approximately 25 to 40%, wherein at least some of the gray elements representing different gray levels; (B) accept user selection of one of the gray elements that appears to most closely blend with a dithered gray background; (C) and estimate a gamma for the display device based on the selected gray element.
- **Pending independent claim 27, of 09/778,704:** A computer readable medium containing instructions that cause a programmable processor to: (A') generate a first gray element based on an estimated gamma for a green channel of a display device; (B') generate a set of red-blue shifted gray elements that represent shifts in the red channel, blue channel, or a combination of the red and blue channels away from the first gray element; (C') and generate a gray balance of the display device based on user selection of one of the gray elements that appears to most closely blend with a gray background.

The comparison: The limitations B and C teach by the A' and C'. But the limitation of A states 25-40% gray level, however, B' limitation states red-blue shift gray level as a way to adjust the second level. By adjusting the red-blue shift gray level, one can obtain gray level of 25-40% of A limitation.

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- **Pending dependent claims 6, 7, 8, 12, 13, 14, 16, 19, 21, 24, 30, 31, 32, 36, 37, 40 and 39 of 09/778,515 have the same claim invention of claims 5, 6, 7, 9, 11, 12, 13, 17, 18, 22, 29, 31, 32, 33, 35, 37, 38, 41 and 42 of 09/778,704 respectively.**

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4-9, 11-17, 19, 21-26, 28-33, 35-37 and 39-48 are rejected under 35 U.S.C.

103(a) as being unpatentable over “Display gamma estimation applet” by Hans Brettel,

copyright 1999, said applet can be located at <http://www.tsi.enst.fr/~brettel/TESTS/Gamma/Gamma.html>

(referenced hereinafter as “Brettel”) and “Why do Images Appear Darker on Some

Displays? An Explanation of Monitor Gamma” By Robert W. Berger, copyright 1997

(referenced hereinafter as “Berger”), and further in view of Adobe Technical Guides

(copyright 2000; hereinafter referenced as “Adobe”).

1. As to claims 1 and 2, Brettel discloses a process for calibrating/estimating the gamma for a monitor, comprising: generating gray elements (i.e., the center square of gray) and a gray background on a display device, the gray background representing a gray level of approximately 25-40% (See the Figure of the Brettel applet. This applet allows for the adjusting of both the center square and the background. Further, the gray values of these items can be varied between 0-254, which, on a percentage scale is 0-100%. For example, a gray value of 84 for the background is equivalent to approximately 33% gray level. The applet works for background

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levels from approximately 2 to 190, which correspond, to approximately .01% to 75% background gray level range. Thus, the applet includes the claimed range of 25-40%); and estimating a gamma for the display device based on user selection of one of the gray elements that appears to most closely blend with the dithered gray background (the applet estimates a gamma value (See the line “gamma=2.14” directly above the sliders. The values displayed by the applet for the gamma is based upon what value the user selects for the gray element (center square) that most closely matches the background gray level.). As to the limitation of “dithered” gray background level, while the reference does not explicitly state that the background gray level is “dithered”, however, the use of dithered background is obvious. See, for example, the Berger article, page 2, section titled “What is the gamma of my display system?”. Herein, the article discusses the use of dither gray images in the setting of gamma for a display (which is the same process as in the Brettel applet). Further, the Berger article shows using gray values of 25%, 50%, and 75%. To one of ordinary skill in the art, it would have been obvious to use dither gray values as the background because of the conventionality of doing (as shown by Berger) and because the two different gray areas (background and center square) need to be generated in different ways for the process to work. And also it would have been obvious to use the teachings of Adobe in the combination of Brettel and Berger since all three of the references are directed to the same process of setting a gamma level using an operator input and because the ability of setting the gamma using the component (RGB) colors allows for a more accurate and distinct gamma correction since the gamma can be adjusted individually for each component rather than a single global gamma adjustment.

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2. With regard to claim 5, Berger mentions that gamma does effect the color components such as red and green on page 2 and discusses that red, green and blue are affected by gamma on page 3.

3. As to claim 7, Brettel on page 1, discloses for estimating the gamma includes: selecting one of a first plurality of gray elements displayed by the display device that appears to most closely blend with the dithered gray background; estimating a coarse gamma for the display device based on the selected one of the first plurality of gray elements; selecting one of a second plurality of gray elements displayed by the display device that appears to most closely blend with the dithered gray background, wherein the second plurality of gray elements includes the selected one of the first plurality of gray elements; and estimating a fine gamma for the display device based on the selected one of the second plurality of gray elements, wherein the estimated fine gamma is the estimated gamma.

4. As to claim 8, Berger on page 2, illustrates the first plurality of gray elements represent greater gradations in gray intensity that the second plurality of gray elements.

5. As to claim 12, Brettel on page 1, illustrates for estimating both the blackpoint and the gray balance of the display device; and characterizing the colorimetric response of the display device based on the estimated gamma, blackpoint, and gray balance.

6. Claims 25 and 26.

Brettel discloses a process for calibrating/estimating the gamma for a monitor, comprising: generating gray elements (i.e., the center square of gray) and a gray background on a display device, the gray background representing a gray level of approximately 25-40% (See the Figure of the Brettel applet. This applet allows for the adjusting of both the center square and the

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background. Further, the gray values of these items can be varied between 0-254, which, on a percentage scale is 0-100%. For example, a gray value of 84 for the background is equivalent to approximately 33% gray level. The applet works for background levels from approximately 2 to 190 which corresponds to approximately .01% to 75% background gray level range. Thus, the applet includes the claimed range of 25-40%); and estimating a gamma for the display device based on user selection of one of the gray elements that appears to most closely blend with the dithered gray background (the applet estimates a gamma value (See the line "gamma=2.14" directly above the sliders. The values displayed by the applet for the gamma is based upon what value the user selects for the gray element (center square) that most closely matches the background gray level.) As to the limitation of "dithered" gray background level, while the reference does not explicitly state that the background gray level is "dithered", however, the use of dithered background is obvious. See, for example, the Berger article, page 2, section titled "What is the gamma of my display system?". Herein, the article discusses the use of dither gray images in the setting of gamma for a display (which is the same process as in the Brettel applet). Further, the Berger article shows using gray values of 25%, 50%, and 75%. To one of ordinary skill in the art, it would have been obvious to use dither gray values as the background because of the conventionality of doing so (as shown by Berger) and because the two different gray areas (background and center square) need to be generated in different ways for the process to work. And also it would have been obvious to use the teachings of Adobe in the combination of Brettel and Berger since all three of the references are directed to the same process of setting a gamma level using an operator input and because the ability of setting the gamma using the component

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(RGB) colors allows for a more accurate and distinct gamma correction since the gamma can be adjusted individually for each component rather than a single global gamma adjustment.

7. Claim 29.

With regard to claim 29, Berger mentions that gamma does effect the color components such as red and green on page 2 and discusses that red, green and blue are effected by gamma on page 3.

8. Claim 31.

Brettel on page 1, discloses for estimating the gamma includes: selecting one of a first plurality of gray elements displayed by the display device that appears to most closely blend with the dithered gray background; estimating a coarse gamma for the display device based on the selected one of the first plurality of gray elements; selecting one of a second plurality of gray elements displayed by the display device that appears to most closely blend with the dithered gray background, wherein the second plurality of gray elements includes the selected one of the first plurality of gray elements; and estimating a fine gamma for the display device based on the selected one of the second plurality of gray elements, wherein the estimated fine gamma is the estimated gamma.

9. Claim 32.

Berger on page 2, illustrates the first plurality of gray elements represent greater gradations in gray intensity that the second plurality of gray elements.

10. Claim 36.

Brettel on page 1 illustrates for estimating both the blackpoint and the gray balance of the display device; and characterizing the colorimetric response of the display device based on the estimated gamma, blackpoint, and gray balance.

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11. With regard to claim 4, Berger on page 3, discloses that color can be measured in a device, and a colorimeter is a device that evaluates and identifies colors in terms of a standard set of synthesized colors. To one of ordinary skill in the art it would have been obvious to use the teachings of Adobe in the combination of Brettel and Berger since all three of the references are directed to the same process of setting a gamma level using an operator input and because the ability of setting the gamma using the component (RGB) colors allows for a more accurate and distinct gamma correction since the gamma can be adjusted individually for each component rather than a single global gamma adjustment.

12. With regard to claims 6 and 13-14, Adobe on pages 2-9, teaches Windows NT, 95, 98 and Mac OS which could operate as clients or servers. Using Adobe Gamma (color management workflow) can be installed on a server or on a client workstation. As claim discloses that transmitting information representing the estimated gamma to a remote server on the network; The Adobe gamma modifies the color image when installed/executed on the server, a workstation, or on a network.

13. As to claims 9, 11, 41, 45 Adobe on page 5, illustrates the gray elements are green elements representing a range of gray levels for the green channel, and the dithered gray background is a dithered green background, the method further comprising: selecting one of the selected green element and a plurality of red-blue shifted elements displayed by the display device that appears to most closely blend with the second dithered green background displayed by the display device; and estimating the gray balance of the display device based on the selected one of the selected green element or selected red-blue shifted element.

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14. As to claim 15, 41-44 and 45-48 Brettel and Berger do not explicitly specify a server and a client on a network. However, Adobe on page 2-9 illustrates, teaches Windows NT, 95, 98 and Mac OS which could operate as clients or servers. Using Adobe Gamma (color management workflow) can be installed on a server or on a client workstation. As claim discloses that transmitting information representing the estimated gamma to a remote server on the network; The Adobe gamma modifies the color image when installed/executed on the server, a workstation, or on a network. Brettel discloses a process for calibrating/estimating the gamma for a monitor, comprising: generating gray elements (i.e., the center square of gray) and a gray background on a display device, the gray background representing a gray level of approximately 25-40% (See the Figure of the Brettel applet. This applet allows for the adjusting of both the center square and the background. Further, the gray values of these items can be varied between 0-254, which, on a percentage scale is 0-100%. For example, a gray value of 84 for the background is equivalent to approximately 33% gray level. The applet works for background levels from approximately 2 to 190 which corresponds to approximately .01% to 75% background gray level range. Thus, the applet includes the claimed range of 25-40%); and estimating a gamma for the display device based on user selection of one of the gray elements that appears to most closely blend with the dithered gray background (the applet estimates a gamma value (See the line "gamma=2.14" directly above the sliders. The values displayed by the applet for the gamma is based upon what value the user selects for the gray element (center square) that most closely matches the background gray level.). As to the limitation of "dithered" gray background level, while the reference does not explicitly state that the background gray level is "dithered", it is the standard use a dithered background. See, for example, the Berger

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article, page 2, section titled "What is the gamma of my display system?". Herein, the article discusses the use of dither gray images in the setting of gamma for a display (which is the same process as in the Brettel applet). Further, the Berger article shows using gray values of 25%, 50%, and 75%. To one of ordinary skill in the art, it would have been obvious to use dither gray values as the background because of the conventionality of doing so (as shown by Berger) and because the two different gray areas (background and center square) need to be generated in different ways for the process to work.

15. Claim 16.

The step of "The system of claim 15, wherein the color image server stores the information to the client in a web cookie, the client transmits the web cookie from the client to the server, and the color image server modifies the color image via the server based on the contents of the web cookie", is obvious because, Adobe on page 2-9 illustrates, teaches Windows NT, 95, 98 and Mac OS which could operate as clients or servers. Using Adobe Gamma (color management workflow) can be installed on a server or on a client workstation. As claim discloses that transmitting information representing the estimated gamma to a remote server on the network; The Adobe gamma modifies the color image when installed/executed on the server, a workstation, or on a network.

16. Claim 17.

As to claim 17, Brettel discloses a process for calibrating/estimating the gamma for a monitor, comprising: generating gray elements (i.e., the center square of gray) and a gray background on a display device, the gray background representing a gray level of approximately 25-40% (See the Figure of the Brettel applet. This applet allows for the adjusting of both the center square and

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the background. Further, the gray values of these items can be varied between 0-254, which, on a percentage scale is 0-100%. For example, a gray value of 84 for the background is equivalent to approximately 33% gray level. The applet works for background levels from approximately 2 to 190, which correspond, to approximately .01% to 75% background gray level range.

17. With regard to claim 4, Berger on page 3, discloses that color can be measured in a device, and a colorimeter is a device that evaluates and identifies colors in terms of a standard set of synthesized colors. To one of ordinary skill in the art it would have been obvious to use the teachings of Adobe in the combination of Brettel and Berger since all three of the references are directed to the same process of setting a gamma level using an operator input and because the ability of setting the gamma using the component (RGB) colors allows for a more accurate and distinct gamma correction since the gamma can be adjusted individually for each component rather than a single global gamma adjustment.

18. Claims 19, 21.

Adobe on page 5, illustrates the gray elements are green elements representing a range of gray levels for the green channel, and the dithered gray background is a dithered green background, the method further comprising: selecting one of the selected green element and a plurality of red-blue shifted elements displayed by the display device that appears to most closely blend with the second dithered green background displayed by the display device; and estimating the gray balance of the display device based on the selected one of the selected green element or selected red-blue shifted element.

19. Claim 22.

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Brettel on page 1, discloses for estimating the gamma includes: selecting one of a first plurality of gray elements displayed by the display device that appears to most closely blend with the dithered gray background; estimating a coarse gamma for the display device based on the selected one of the first plurality of gray elements; selecting one of a second plurality of gray elements displayed by the display device that appears to most closely blend with the dithered gray background, wherein the second plurality of gray elements includes the selected one of the first plurality of gray elements; and estimating a fine gamma for the display device based on the selected one of the second plurality of gray elements, wherein the estimated fine gamma is the estimated gamma.

20. Claim 23.

Berger on page 2, illustrates the first plurality of gray elements represent greater gradations in gray intensity that the second plurality of gray elements.

21. Claim 24.

Adobe on page 5, illustrates the gray elements are green elements representing a range of gray levels for the green channel, and the dithered gray background is a dithered green background, the method further comprising: selecting one of the selected green element and a plurality of red-blue shifted elements displayed by the display device that appears to most closely blend with the second dithered green background displayed by the display device; and estimating the gray balance of the display device based on the selected one of the selected green element or selected red-blue shifted element.

22. Claim 28.

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With regard to claim 4, Berger on page 3, discloses that color can be measured in a device, and a colorimeter is a device that evaluates and identifies colors in terms of a standard set of synthesized colors. To one of ordinary skill in the art it would have been obvious to use the teachings of Adobe in the combination of Brettel and Berger since all three of the references are directed to the same process of setting a gamma level using an operator input and because the ability of setting the gamma using the component (RGB) colors allows for a more accurate and distinct gamma correction since the gamma can be adjusted individually for each component rather than a single global gamma adjustment.

23. Claim 30.

Adobe on pages 2-9, teaches Windows NT, 95, 98 and Mac OS which could operate as clients or servers. Using Adobe Gamma (color management workflow) can be installed on a server or on a client workstation. As claim discloses that transmitting information representing the estimated gamma to a remote server on the network; The Adobe gamma modifies the color image when installed/executed on the server, a workstation, or on a network

24. Claims 33, 35.

Adobe on page 5, illustrates the gray elements are green elements representing a range of gray levels for the green channel, and the dithered gray background is a dithered green background, the method further comprising: selecting one of the selected green element and a plurality of red-blue shifted elements displayed by the display device that appears to most closely blend with the second dithered green background displayed by the display device; and estimating the gray balance of the display device based on the selected one of the selected green element or selected red-blue shifted element.

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25. Claim 37

Adobe on pages 2-9, teaches Windows NT, 95, 98 and Mac OS which could operate as clients or servers. Using Adobe Gamma (color management workflow) can be installed on a server or on a client workstation. As claim discloses that transmitting information representing the estimated gamma to a remote server on the network; The Adobe gamma modifies the color image when installed/executed on the server, a workstation, or on a network.

26. Claims 39-40.

Adobe on pages 2-9, teaches Windows NT, 95, 98 and Mac OS which could operate as clients or servers. Using Adobe Gamma (color management workflow) can be installed on a server or on a client workstation. As claim discloses that transmitting information representing the estimated gamma to a remote server on the network; The Adobe gamma modifies the color image when installed/executed on the server, a workstation, or on a network.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A Amini whose telephone number is 703-605-4248. The examiner can normally be reached on 8-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 703-305-4713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Javid A Amini
Examiner
Art Unit 2672

Javid Amini


JEFFERY BRIER
PRIMARY EXAMINER